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# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

355 West North Temple  
3 Triad Center, Suite 350  
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January 30, 1990

TO: Wayne Hedberg, Permit Lead  
FROM: Holland Shepherd, Reclamation Soils Specialist *HW3*  
RE: Barrick Mercur Dump Leach Area 1 Decommission Review, M/045/017,  
Tooele County, Utah

I have reviewed the Decommissioning and Closure plan submitted by Barrick Mercur on October 26, 1989. The following are my comments:

***R613-004-110 - Reclamation Plan***

The reclamation of Leach Area #1, as described in this amendment is slightly different from that described in the approved plan (page II-77a). The operator has not mentioned the 12 inch clay shale cap to be placed over the expired ore, or the 12 inches of topsoil material to be placed over the 36 inches of subsoil material.

The Division is willing to approve of the elimination of the 12 inch clay cap, but not the 12 inches of topsoil. The operator needs to include the application of topsoil in the reclamation of this facility to meet Division standards. Topsoil will accelerate the growth of vegetation and reduce, substantially, the possibility of erosion on the decommissioned dump surface.

The operator also needs to indicate to the Division the seed mixture to be used for final reclamation, the seeding rates, and method of application. No mention of seeding was made in the amended plan.

jb  
cc: Tony Gallegos  
MN4/104



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February 12, 1990

TO: Wayne Hedberg, Permit Lead

FROM: Tony Gallegos, Reclamation Engineer *adg*

RE: Barrick Mercur Dump Leach Area 1 Decommission Review,  
M/045/017, Tooele County, Utah

I have reviewed the Decommission and Closure plan submitted by Barrick Mercur and list my comments below:

## R613-004-111.6 - Reclamation Plan, Slopes

From the submitted drawing entitled "Dump Leach No. 1, Proposed Decommission Plan", I arrived at an approximate slope of 3.2 (horizontal:vertical) or 34 degrees for the proposed boundary for the leached material at the northwest end of cross-section A'-A. The approximate slope for the proposed waste fill at the same location was 11:7 or 32 degrees. The mineral rules require that waste piles be regraded to a "stable" configuration. Since no numerical value is given, the decision of stability is based on site specific details.

I was unable to find the approved closure plan dated August 9, 1985, which Barrick referred to in this submission. I am assuming that this revision mainly involved the amount and types of material to be placed over the dump. I did find mention of leach dumps being graded to achieve a domed slope of 0.5% in one of their reports on the same page referenced by Holland Shepherd in his review (page II-77a). I also found the recommendation that leach dumps be regraded to a 2:1 (27 degree) slope in "Guidelines for Cyanide Heap Leaches", document 1044R/1-8. Since I have not been to the site, I would recommend that all the slopes of the leach dump be regraded to a 2:1 slope or less for stability, unless this can be demonstrated to be impractical.

jb  
cc: Holland Shepherd  
WMN6/1